AMERICAN

JULY · 1958

Cinematographer

THE MAGAZINE OF MOTION PICTURE PHOTOGRAPHY

In This Issue . . .

Beginning an important new series of articles on

ANIMATED FILM TECHNIQUES

35c

FOREIGN 45

Gordon Yoder shooting flood damage in the Dallas area

"For widest exposure and processing latitudes...

my choice is Du Pont film,"

says Gordon Yoder, steff cemeremen in Dallas, Texas, for Hearst Metrotone News, Inc.

Mr. Yoder, winner of the 1957 title, "Newsreel Cameraman of the Year," in the N.P.P.A.—Encyclopaedia Britannica contest, tells us that all his 35 mm work is done with Du Pont Superior® 2 and "Superior" 4 Motion Picture Film.

Like all newsreel cameramen, Mr. Yoder must be able to count on the latitude of his film since news coverage can't be reshot. "Regardless of indoor or outdoor lighting, temperature, action, weather, I have to come up with usable shots," he says. "In addition, I can't even process my own film—it's rushed to New York and developed there. So I can't compensate for varied exposure by controlling the processing.

"Despite this handicap," Mr. Yoder continues, "I can still shoot confidently with Du Pont film. There has been only one exposure complaint from my office in ten years and, even then, the story was usable!"

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Cinematographer

THE MAGAZINE OF MOTION PICTURE PHOTOGRAPHY

PUBLICATION OF THE AMERICAN SOCIETY OF CINEMATOGRAPHERS

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Vol. 39 JULY • 1958 No. 7

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ON THE COVER

CAMERA REHEARSAL—French studio technicians push camera dolly over tracks laid in Place Furstenberg, Paris, as cinematographer Joseph Ruttenberg, A.S.C., crouching low behind camera, studies action in finder of CinemaScope-equipped Mitchell as actor Louis Jourdan goes through paces for scene for "Gigi." Story of photography begins on page 424 of this issue.

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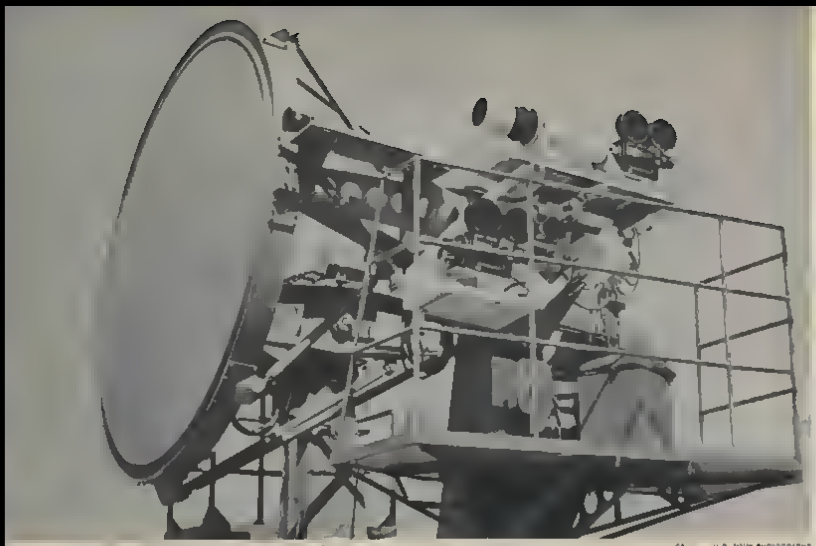

Mitchell Camera installation for radar tracking studies.

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Data dial instrumentation by Mitchell camera.

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Fifty Mitchell 35mm cameras are used on radars, tracking camera mounts and fixed tripods to record missile and rocket development. Camera motors allow synchronous as well as in-phase operation of several cameras covering a test... important in film assessing. Eight 16mm Mitchell cameras are used for pictorial coverage of tests.

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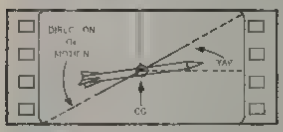
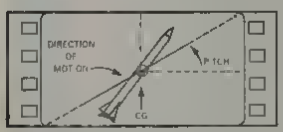
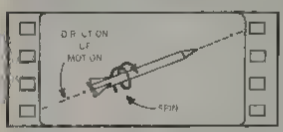
The Mitchell camera, by virtue of its exact pin registration during film exposure, allows these data to be determined to a reasonably high degree of accuracy through the use of film assessing equipment built to take advantage of this feature



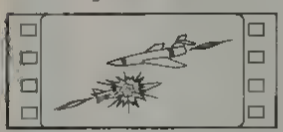
Yaw—Side to side motion of missile



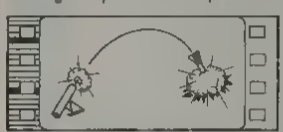
Pitch—Up-and-down motion of missile



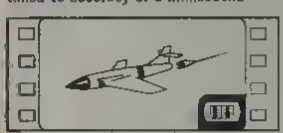
Roll—Turning motion of missile



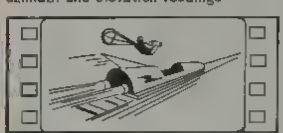
Miss Distance—Gap between missile and target at point of interception



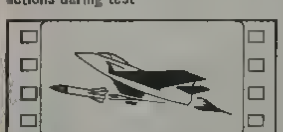
Flight Time—A series of lines on film, timed to accuracy of 1 millisecond



Position Data—Target location with azimuth and elevation readings



Pictorial Record—Record of all visible actions during test



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WHAT'S NEW

. . . in equipment, accessories, services

Cord Power Distribution

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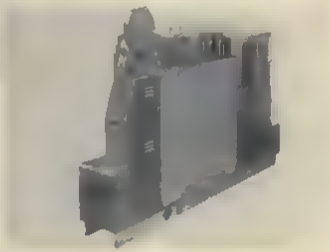


16mm Film Processor

Houston Fearless Corp., 11805 West Olympic, Los Angeles 64, Calif., announces a new, improved model of the Houston Fearless Labmaster 16mm B&W film processor. Of modular design, it will process negative or positive film and, with the addition of an extra unit, also process reversal film. It is fully automatic, with speeds up to 40 f.p.m. Other features include stainless steel tanks, built-in refrigeration system and air-compressor, turbulation pumps on developer tanks, and clutch-drive film transport. The neg-pos model is priced at $4,175, complete, ready to operate.

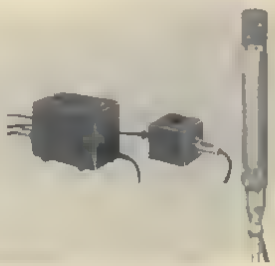
Miniature TV Camera

Photo Research Corp., 837 No. Cahuenga Blvd., Hollywood 38, Calif., announces the Spectra High-resolution Miniature TV camera, which is particularly adaptable for use as an electronic viewfinder when used in conjunction with regular Mitchell Finder and Spectra monitor.

Only 7½" x 2.6" x 2.6" in size, camera uses 16mm motion picture lenses with standard mounts, including zoom lenses. Adjustment at rear permits focusing down to a few inches. Resolution: 600 lines, 8 M.C. Illustrated data sheet is available from the company.

Hot Splicer

Hollywood Film Co., 956 No. Seward St., Hollywood 38, Calif., announces a new combination table model hot splicer for 16mm, 17½mm, 35-32mm, Cinema Scope and 35mm film, using one set of pins. Additional features include special scraping block, adjustable scraping blade, and thermostatically-controlled heating-element. List price is $329.50.



Polydirectional Microphone

Camera Equip. Co., New York City, announces its AKG Model C-12 Poly-directional condenser mike which features a switch box for remote control of its directional characteristics. Frequency response is from 50 to 10,000 cps, and range is from 20 to 15,000 cps. Illustrated literature is available on complete line. ■

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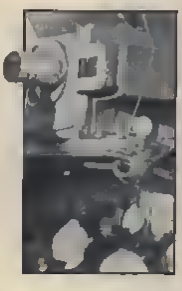

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1956 — Norbert Brodine, A.S.C. "The Pearl" — Loretta Young Show

1957 — Harold E. Wellman, A.S.C. "Hemo, The Magnificant" — Bell Telephone Scientific Series

Photographic Assignments

Who, where and what the industry's cameramen were shooting last month

*Asterisks indicate commercial and television film productions.

ALLIED ARTISTS

● Floyd Crosby, ASC, "The Far Wanderer" (Lindsley Parsons Prod.) with Barry Sullivan and Peter Graves. Harmon Jones, director. "Crime and Punishment, U.S.A." with George Steven Hamilton and Mary Murphy. Dennis Sanders, director.

● Carl Guthrie, ASC. "Joy Ride" with Regis Toomey and Ann Doran. Edward Berads, director.

AMERICAN NATIONAL

● Bob Hoffman, "Target"* (Ziv TV) with Adolphe Menjou, Dane Clarke, director.

CALIFORNIA STUDIOS

● Kenneth Peach, ASC, Westinghouse industrial film* (Roland Reed Prods.) Arthur Dreifuss, director.

● Howard Schwartz, "Have Gun Will Travel"* (Filmaster Prods.) with Richard Boone. Various directors.

● Henry Sharp, ASC, Bayer Aspirin commercial* (Roland Reed Prods.) Wm. Thiele, director. American Legion Film. Wm. Thiele, director. U.S. Navy Training Film (Roland Reed Prods.) Arthur Pierson, director.

● Fleet Southcott, "Gunsmoke"* (Filmaster Prods.) with James Arness and Dennis Weaver. Various directors.

CASCADE PICTURES

● Elwood Baldell, ASC, Mars Candy Bar, Wheaties, Rise Shaving Cream commercials.* George Seitz, Jr., director.

● Roy Seawright, Oasis Cigarette commercial.* Paul Vaughn, director. Swanson TV Dinner commercial.* Stuart Frye, director.

COLUMBIA

● Gert Andersen, ASC, "Shirley Temple's Storybook"* (Screen Gems) with Shirley Temple. Richard Morris, director.

● Henry Freulich, ASC, "Good Day for a Hanging" (Morningside Prods.) with Fred MacMurray and Maggie Hayes. Nathan Juran, director.

● Burnett Guffey, ASC, "Gidget" (CinemaScope & Color) with Sandra Dee and James Darren. Paul Wendkos, director.

■ Fred Jackman, "Adventures of Rin-Tin-Tin"* (Screen Gems) with Lee Aaker and James Brown. Various directors.

● Charles Lawton, ASC, "Miss Casey Jones" with Doris Day and Jack Lemmon. Richard Quine, producer director.

● Ted Moore, "The Man Inside" (Warwick Prods., shooting in Spain) with Jack Palance and Anita Ekberg. John Gilling, director.

WALT DISNEY

● Gordon Avil, ASC, "Zorro"* with G. Williams. Charles Barton, director.

WALT DISNEY

● Loyal Griggs, ASC, "Tonka" with Sal Mineo and Fess Parker, Lewis R. Foster, director.

● Winton Hoch, ASC, "Darby O'Gill and the Little People" (Walt Disney Prods. for Buena Vista) with Albert Sharpe and Janet Munro. Robert Stevenson, director.

● William Snyder, ASC, "Elfego Baca"* with Robert Loggia and Robert Simon. Norman Foster, director.

FILMCRAFT STUDIOS

● Virgil Miller, ASC, "You Bet Your Life,"* with Groucho Marx. Robert Dwan, director.

FOX WESTERN AVE.

● Lloyd Ahern, ASC, "How to Marry a Millionaire"* Various directors.

● Frank Redman, ASC, "The Perry Mason Show,"* with Raymond Burr. Wm. Russell, director.

● Charles Van Enger, ASC, "Man Without a Gun"* with Rex Reason. John Peyser and Chas. Haas, directors.

AMERICAN SOCIETY OF CINEMATOGRAPHERS

FOUNDED January 3, 1919, The American Society of Cinematographers is comprised of the leading directors of photography in the Hollywood motion picture and TV film studios. Its membership also includes cinematographers in foreign lands. Membership is by invitation only.

●

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GENERAL SERVICE

● Neal Beckner, "The Adventures of Ozzie & Harriet"* (Stage 5 Prods.) with Ozzie, Harriet, David, and Rickey Nelson. Ozzie Nelson, director.

● Henry Sharp, ASC, "Bold Journey"* (Advenco Prods.). Leon Barsha, director.

● Harry Wild, ASC, "Bob Cummings Show,"* (Laurmac Prods.) with Bob Cummings and Rosemary De Camp. Bob Cummings, director.

INDEPENDENT

● Lucien Ballard, ASC, "Anna Lucasta" (Longridge Prods. for UA release) with Sammy Davis, Jr. and Eartha Kitt. Sidney Harmon, producer.

● Irving Glassberg, ASC, "The Rabbit Trap" (Hecht-Hill Lancaster, UA release) with Ernest Borgnine, David Brian and Bethel Leslie. Philip Leacock, director.

● Sam Leavitt, ASC. "Pork Chop Hill" (Melville Prods." UA release) with Gregory Peck and Harry Guardino. Lewis Milestone, director.

● Meredith Nicholson, "Missile to the Moon" (Laytoo Film Prods. for Astor release) with Richard Travis and Cathy Downs. Richard Cunha, director.

● John Nickolaus, "Blood Money" (Sparta Prods.) with Tom Pittman and Virginia Aldridge. Joel Rapp, director.

KEYWEST STUDIOS

● Walter Strenge, ASC, "The Medicine Man" (Monopegic Prods.) Wilbur Blume, director, "This is the Life"* (Family Films). William Claxton, director. "This is the Answer"* (Family Films). William Claxton, director.

KTTV STUDIOS

● John Martin, ASC, "Fury"* (TPA Prods.) with Peter Graves and Bobby Diamond. Ray Nazarro, director.

LINKLETTER'S PLAYHOUSE

● Alan Stensvold, ASC, "People Are Funny"* with Art Linkletter. Irv Atkins, director.

METRO-GOLDWYN-MAYER

● Lucien Ballard, ASC, "Silent Service"* (Calif. National Prods.) Sobey Martin, director.

● Stephen Dade, "The Angry Hills" (shooting in Greece) with Robert Mitchum and Elizabeth Mueller. Robert Aldrich, director.

● Robert Krasker, "Doctor's Dilemma" (Color, shooting in London) with Leslie Caron and Dirk Bogarde. Anthony Asquith, director.

● Harold Marzorati, ASC, Viceroy commercial.* W. Arnett, director.

● Harkness Smith, "Northwest Passage"* with Keith Larsen. George Waggner, director.

● Robert Surtees, ASC, "Ben Hur" (Metrocolor, camera 65, shooting in Italy) with Charlton Heston and Jack Hawkins. William Wyler, director.

● Harold Wellman, ASC, American President Line commercial.* Dave Monahan, director.

(Continued on Page 408)

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PHOTOGRAPHIC ASSIGNMENTS

(Continued From Page 406)

MOTION PICTURE CENTER

- CHARLES BURKE, "This is Alice"* (Desilu Prods.) with Patty Ann Gerrity Sidney Salkow, director
- HENRY CRONJAGER, "Wyatt Earp"* (Desilu Prods.) with Hugh O'Brian. Frank MacDonald, director
- SID HICKOX, ASC, "Lucille Ball, Desi Arnaz Show"* (Desilu Prods.) with Lucille Ball and Desi Arnaz. Jerry Thorpe, director
- NICK MUSURACA, ASC "The Line Up"* (Desilu Prods.) with Warner Anderson and Tom Tully Various directors.
- JOE NOVAK ASC, "The Walter Winchell File"* (Desilu Prods.) with Walter Winchell. Alvin Ganzer, director.
- KENNETH PEACH, ASC, "Lassie"* (Jack Wrather Prods.) with Jon Provost and June Lockhart Lesley Selander, director

PARAMOUNT

- HASKELL BOGGS, "The Geisha Boy" (Technicolor) with Jerry Lewis and Marie MacDonald Frank Tashlin, director
- BORIS KAUFMAN, ASC, "That Kind of Woman" (shooting in N.Y.) with Sophia Loren and Tab Hunter Sidney Lumet, director
- WALLACE KELLEY, ASC, "The Young Captives" with Connie Stevens and Steven Marlowe Irvin Kershner, director

PARAMOUNT SUNSET

- JACK MACKENZIE, ASC, "State Troopers"* (Revue Prods.) with Rod Cameron, Various directors.
- ALAN STENSVOLD, ASC, "Night Court"* (Sandy Howard Prods.) with Jay Jostyn. Sandy Howard, director
- LESTER WHITE, ASC, "Rescue"* (Cinefilm, Inc. with Marvin Schnall Robert Walker, director.

REPUBLIC STUDIOS

- EDWARD COLMAN, ASC, "Pete Kelly Blues"* (Pilot, Mark VII Ltd.) Joe Parker, director
- ARCH DALZELL, 'Buckskin"* (Bedford Corp.) with Tommy Nolan Various directors, "Restless Gun"* (Window-Glen Prods.) with John Payne Edward Ludwig, director.
- BENJ. KLINE, ASC, "Wagon Train"* (Revue Prods.) Various directors
- H. F. KOENKAMP, ASC, Dodge commercial* Dave Monahan, director
- LIONEL LINDON, ASC, "Cimarron City"* (Revue Prods.), Various directors.
- JOHN RUSSELL, ASC, "Suspicion"* (Revue Prods.) Robert Stevens, director, "Alfred Hitchcock Presents"* (Revue Prods.) Various directors, "Schlitz Playhouse"* (Revue Prods.) John Brahm, director
- WILLIAM SICKNER, ASC, "Leave it to Beaver"* (Gomalco Prods.) with Barbara Billingsley and Hugh Beaumont Norman Tokar, director, "Bachelor Father"* (Bachelor Prods.) with John Forsythe Various directors

(Continued on Page 412)

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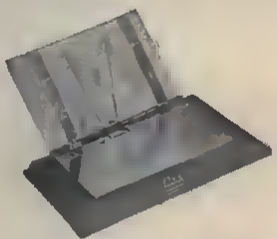

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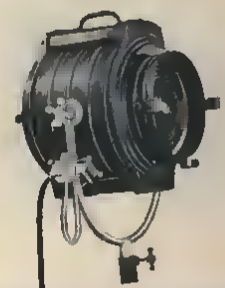

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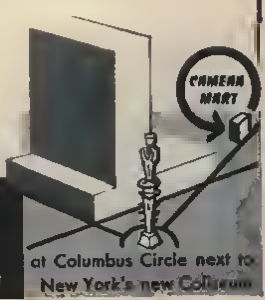

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PHOTOGRAPHIC ASSIGNMENTS

(Continued From Page 408)

REPUBLIC STUDIOS

● MACK STENGLER, ASC, "Jack Benny Show"* (Revue Prods.) with Jack Benny. Don Weis, director.

● ELLIS THACKERY, ASC, "Wells Fargo"* (Overland Prods.) with Dale Robertson. Earl Bellamy, director; "Restless Gun"* (Window Glen Prods.) with John Payne. Edward Ludwig, director. "Buckskin"* (Bedford Corp.) with Tommy Nolan. Hirschel Daugherty, director.

RKO-PATHE

● GEORGE DISKANT, ASC, "Mr. Adams & Eve"* (Bridget Prods.) with Ida Lupino and Howard Duff. Richard Kinon, director.

SUTHERLAND STUDIOS

● GILBERT WARRENTON, ASC, U.S. Steel United Fund.* True Boardman, director.

TELEPIX STUDIOS

● RAY FOSTER, ASC, Nutra tonic cream rinse commercial.* Bob Newman, director.

20TH CENTURY-FOX

● CHARLES CLARKE, ASC, "These Thousand Hills" (CinemaScope & Color) with Don Murray and Richard Egan. Richard Fleischer, director.

● MILTON KRASNER, ASC, "The Remarkable Mr. Pennypacker" (CinemaScope & DeLuxe color) with Clifton Webb and Dorothy McGuire. Henry Levin, director.

● WILLIAM MELLOR, ASC, "The Diary of Anne Frank" (CinemaScope) with Millie Perkins and Joseph Schildkraut. George Stevens, producer-director.

● OSWALD MORRIS, "The Roots of Heaven" (D. F. Zanuck Prods., CinemaScope, DeLuxe color, shooting in French Equatorial Africa) with Trevor Howard, Errol Flynn and Juliette Greco. John Huston, director.

● LEON SHAMROY, ASC, "Rally 'Round the Flag, Boys!" (CinemaScope & Color) with Joanne Woodward and Paul Newman. Leo McCarey, director.

● LEO TOVER, ASC, "In Love and War" (CinemaScope & Color) with Robert Wagner and Dana Wynter. Philip Dunne, director.

● FREDERICK YOUNG, "The Inn of the Sixth Happiness" (CinemaScope, Deluxe color, shooting in London) with Ingrid Bergman, Curt Jurgens, and Robert Donat. Mark Robson, director.

UNIVERSAL-INTERNATIONAL

● ARTHUR ARLING, ASC, Ford, Halo Shampoo commercials.* Jack Daniels, director.

● JAMES DROUGHT, DuPont commercial.* Virgil Vogel, director.

● PHILIP LATHROP, Rawhide"* (CBS-TV) with Eric Fleming. Charles Warren, director.

● RUSSELL METTY, ASC, "Step Down to Terror" with Colleen Miller and Charles Drake. Harry Keller, director.

● CLIFFORD STINE, ASC, Project 1018 commercial.* Albert Townsend, director.

(Continued on Page 454)

ARRI
Photo shows six Arriflex 16 cameras and blimp assembled in one of Calvin's sound stages.
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MOTION PICTURES
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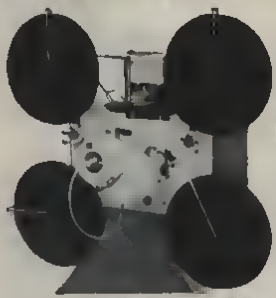

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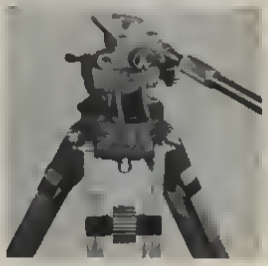

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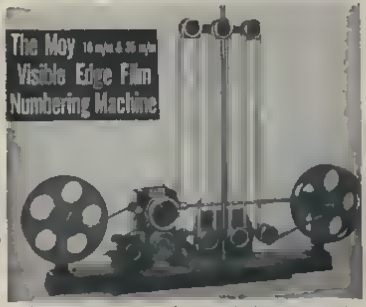

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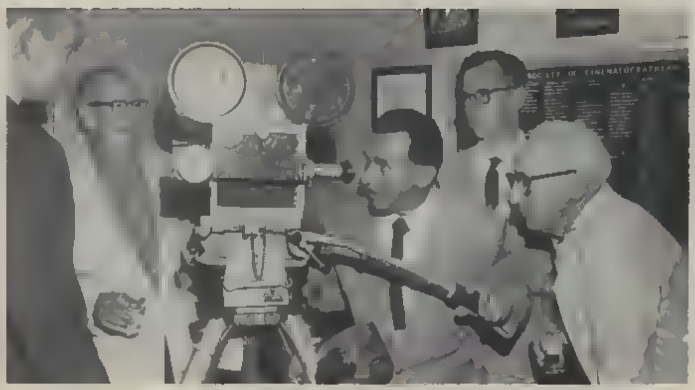

ON DISPLAY for ASC members at Society's June meeting was this Vinten high-speed instrumentation camera being demonstrated by H. S. Weisbrod (left) and Guy Hansen (2nd from right) of Bosson-Lehner Corp., Los Angeles. To Paul Eagler, ASC, (2nd from left), Joseph Biroc, ASC, behind camera, and Hal Mohr, ASC, far right. Cameramen exhibited great interest in the smooth functioning Vinten tripod head.

ERNEST HALLER, ASC, recently wound up the photography of Mirisch Bros.' "Men of the West" with large scope exteriors using Sonora, Calif. Photography was in CinemaScope and color.

MACK STENGLER, ASC, (right) shows Phil Tannura, ASC, memento given him by Jack Benny upon completion of 4-picture series for TV—a gold money clip. The currency is Stengler's.

HANDY WITH tools as well as camera, Hal Mohr, ASC, recently constructed sturdy metal sheathed carrying case for his Cinephon camera and accessories which he proudly displays here.

THE ASC at its June meeting, tendered Arthur E. Gavin (right) with memento commemorating his 10th year as editor of American Cinematographer. President Walter Strenge made presentation.

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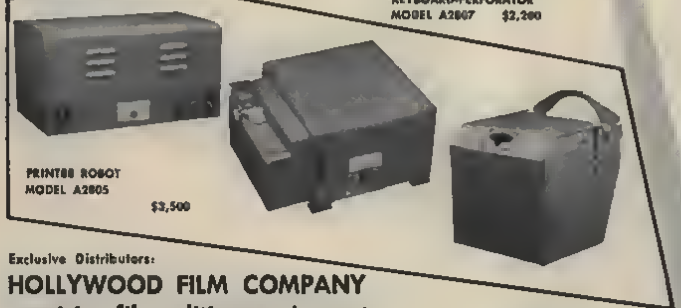

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F & B

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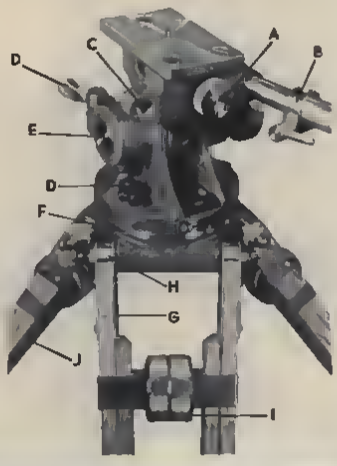

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TECHNICAL QUESTIONS & ANSWERS

Conducted by Walter Strenge, A.S.C.

QUESTIONS relating to cinematography or other phases of film production are invited from readers and will be answered by letter by Walter Strenge or by other qualified members of the American Society of Cinematographers. Questions and answers considered of general interest will appear in this column.—*Ed.*

Q Please furnish an approximate correlation between applied voltage and resulting color temperature for any of the PAR-type lamps, when used with stepped-up voltage.—*M. D. McC., Dallas, Texas.*

Answer: Color temperature is a function of the square root of the applied voltage. Over a two-to-one change in voltage, it can be represented by the equation:

Color temperature:

$$Tc = C_1 \sqrt{V - C_2} + C_3$$

where C_1, C_2, C_3, are constants.

Since C_1 is small (in the order of 2×10^{-5}) and C_3 is large (around 10^3) the effect on the color temperature is much less than being directly as the square root of the voltage. C_2 may be around 8, producing only a slight offset in the position of the curve. The particular values of these constants will be different for different lamps. However, if they are determined for a particular lamp from three readings, the formula can be used to determine the color temperature at intervening voltages to an accuracy around 15°K.—*Karl Freund, A.S.C., Photo Research Corp.*

Q How does the professional combine cartoon action with live action? I realize one could use a mask for certain effects, but the effect I want to make is where the animated character performs in front of the live-action background with live actors, without being transparent in any way.

My second question is: Since I have switched to using 1000-watt photofloods for illumination on my animation stand, I have noticed splotches of moisture between the cels, which I press down on the glass plate; I find them practically impossible to remove. Is this caused by heat from the photofloods? How can I correct the trouble? — *B. H., Bellaire, Texas.*

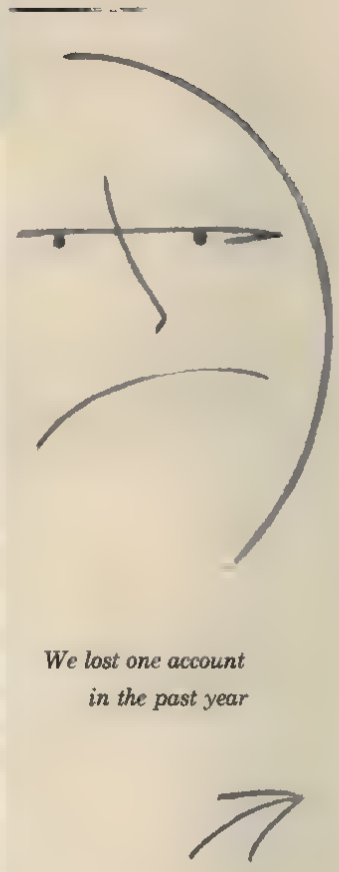
Answer: Live action and cartoon animation may be combined by several different methods. A traveling matte of the animation can be produced by photographing the cartoon cels in silhouette by using backlight. The cartoon detail image is then photographed over a black background on a separate negative. Suitable register prints are made from these negatives and combined with the live action—usually with an optical printer—although contact printers are sometimes used. The silhouette image film is bi-packed with the live-action positive and exposed to the dupe negative. The cartoon detail image over black is then exposed into the area left un-exposed by the silhouette matte.

Another method which eliminates the need for a film matte uses a system of printing in the camera. Here the live-action master is bi-packed in the camera with the dupe negative and exposed to the cartoon cels in silhouette by backlight. The live-action is thus printed, leaving an unexposed area of the cartoon figure. Removing the live-action master and exposing in the detail cartoon action over a black background completes the process.

Still another and simpler system employs process projection. Here the animation cels are placed over a black process screen on which the live-action is projected from the rear. The composite image is photographed in one operation. Although results are usually not quite as good as that obtained by the matting process, it is simpler, faster, and more economical. Because of the close registration required between the several elements being combined, it is of prime importance that precise, solid equipment and a register-pin camera be used. Otherwise, mis-register or weaving images will result. It is also important that the same register-pin geometry be used throughout the photography and printing steps.

The apparent moisture splotches you have noticed between cels are probably Newton rings, which are caused where areas are in very close contact. Spraying the cels lightly with liquid wax or an

(Continued on Next Page)



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QUESTIONS & ANSWERS

(Continued From Preceding Page)

anti-static compound likely will eliminate the trouble.—*Ub Iwerks, A.S.C., Walt Disney Studio*

Q I wish to produce the effect on the screen of a scene as viewed through a pair of binoculars. How can this be achieved?—*R. R. P., Portland, Ore.*

Answer: If you are shooting with one of the professional cameras purchase a binocular matte and place it in the camera when photographing the scene. The effect of the binocular masking can also be produced when the film is printed, by a laboratory equipped to do special optical effects.—*Ray Mercer, A.S.C.*

Q I would like to know how the "invisible man" process is done; also if it can be done in color as well as in black-and-white.—*W. D. Hammond, Ind.*

Answer: The "Invisible Man" was accomplished by the use of a process invented by Frank D. Williams in 1916, under patent No. 1273435 issued to him July 23, 1918. A copy of this patent (obtainable from the U. S. Patent Office in Washington) will fully describe the process. The method is generally referred to as the traveling matte process and is now in general use by the motion picture industry. It can be used in color productions as well as those in black-and-white.—*John Fulton, A.S.C.*

Q How do you make a title with white but shaded letters superimposed on live-action scenes? Another complicated form of this titling is observed where the titles are dissolved into the next ones without necessarily changing the live action background, which continues all through the series of main credit titles. How is this done?—*S. S., Istanbul, Turkey.*

Answer: Most professional titles are made by hand-lettering the text on glass in color or black-and-white. The title glass is photographed from the front, with a black backdrop behind. The backdrop is then removed and the title shot a second time, with a light coming from behind the glass, and this serves as a matte. The matte is run optically with the background in the printing, which produces the effect desired, with fading or dissolving being accomplished where necessary.—*Ray Mercer, A.S.C.* ■

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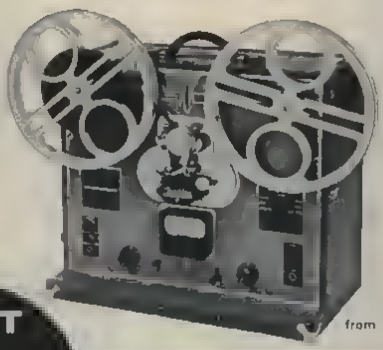

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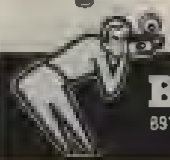

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CINEMATOGRAPHER Joseph Ruttenberg (standing) aids operator and assistant place camera for a low shot on Paris street corner

RUTTENBERG lines up shot through finder of low-mounted camera Dolly trucks, a French development, are of advanced design

Location-Shooting In Paris For "Gigi"

Joseph Ruttenberg's imaginative moving camera shots in color and CinemoScape play big part in enhancing action staged in Maxim's, the Bois de Boulogne and other Parisian locales.

By ARTHUR E GAVIN

WATCHING "GIGI" on the screen, you are scarcely aware that it was photographed for the most part on actual locales in France, that the scenes in Maxim's were really filmed in the renowned Paris restaurant; and that the Parisian streets, boulevards and parks are the real thing. And you'll likely be oblivious of the moving camera, so skillfully and abundantly used throughout most of the picture, that creates for you a realistic sense of participation in the drama so that you seem to move right along with the players and become part of the delightful experiences unfolding on the screen.

With all due respect to the fine script, the artful direction and the grand performances of the principals, it is the photography—skillfully planned and executed—that plays a very large part in the success of this MGM color production, now in its premiere release across the country.

"Gigi," the story of a young girl, her family's absorption with romance and her own magnetism for a wedding ring, is laid in Paris in the Gay Nineties —one of the most glamorous, flamboyant, and charming eras the world has ever known, "when men had time to love and women had nothing else to live for."

In choosing Joseph Ruttenberg, A.S.C., to photograph "Gigi," director Vincente Minnelli, who has a passion for moving camera shots, acquired both an expert craftsman and a recognized exponent of the "fluid" camera. During his long and successful career at MGM, Joseph Ruttenberg has achieved photography with a boom-mounted camera that

has won high praise from his contemporaries and contributed largely to the photographic achievements that have netted him three Academy Awards ("The Great Waltz," 1938; "Mrs. Miniver," 1942; and "Somebody Up There Likes Me," 1956).

Ruttenberg's "fluid" camera technique and his skill in overcoming the many problems encountered in shooting within the mirrored splendor of Maxim's comprise the important story of the photography of "Gigi." Ruttenberg's years of experience shooting overseas (he's photographed six pictures there to date) has acclimatized him to the vicissitudes usually encountered by Hollywood cameramen when making pictures in England, France, Italy and other continental locales. Here he found local technical personnel eager and willing, but unaccustomed to the techniques and production shortcuts of Hollywood. In this respect, however, Ruttenberg found them eager students and passionately devoted to improving their methods and bettering the lot of French motion picture technician.

"It would be a splendid thing for both Hollywood and foreign studios," he says, "if there could be more interchange of industry ideas, so that production operations could be universally standardized."

On the "Gigi" assignment, Ruttenberg found something in equipment that not only excels anything yet developed by Hollywood studios, but which very greatly facilitated executing the often complicated moving camera shots for the picture in Paris. This is a camera dolly and tracks developed by a French motion picture technician. The unique tracks are shown in the accompanying photos.

LESLIE CARON'S makeup for "Gigi" comes in for close scrutiny by production designer Cecil Beaton (center) and cinematographer Ruttenberg during pre-production filming of tests for the picture in Hollywood.

Made of tubular steel and assembled in strongly-welded sections of convenient length, the track sections can be joined together quickly and made fast by means of a novel locking device not unlike an oversize screen door hook. The track is made in curved as well as straight sections, and there are also "X" sections which permit the dolly to make abrupt right angle moves. Ruttenberg used this equipment extensively in shooting exterior action demanding a moving camera, and also for some dolly shots made in Maxim's.

With a director who knows when to use the moving camera and a cinematographer who is skilled in planning and executing such shots, from a technical standpoint the production represents excellent examples of this cinematic technique. The boyant mood of "Gigi" is greatly enhanced by the strong pattern of visual movement; even scenes which at first appear static metamorphose from a medium to a close shot or undergo a subtle change in camera angle through expert maneuvering of the dolly or crane-mounted camera. The camera follows a player walking; a couple strolling the park; or Jourdan or Chevalier singing one of the many lively Lerner-Lowe numbers created for "Gigi." The addition of camera movement to the photography of these scenes marks a new and pleasing departure in song presentation on the screen.

To dolly, follow or truck the camera shooting such action, the camera crew laid dolly tracks in such locales as the

(Continued on Page 440)

HERE AGAIN camera is mounted low for an exterior shot in Paris for "Gigi." Ruttenberg (hatless, left foreground) is discussing essentials of the take with technicians. Note booster light with filter mounted before it at extreme left.

ONE OF FEW static camera shots filmed for "Gigi." Location is one of many beautiful parks in Paris. Note tracks which were used earlier for long trucking shot.

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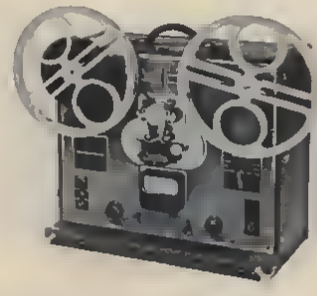

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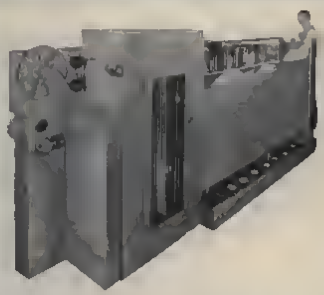

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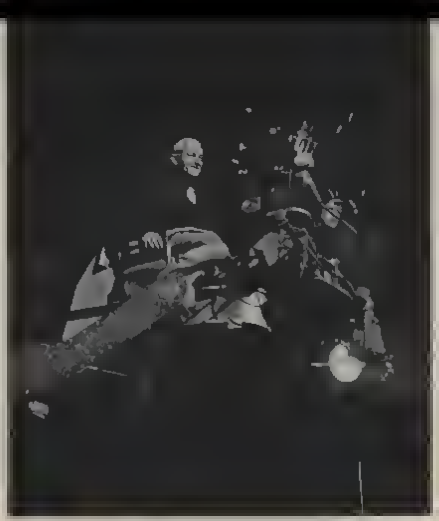


ARTHUR FEINDEL, ASC, lines up start of intricate boom shot that opens Ford Thunderbird TV commercial

Expert Photograph

By JOHN FORBES

BOOM-MOUNTED CAMERA is lowered and moved forward to catch the new 4-door Thunderbird as it is driven onto ballroom floor

LIGHTS, CAMERA and mike were moved in closer for shot of actor Dick Powell introducing the new car

HOW THE EXPERT camera work of Hollywood's directors of photography backed by the unlimited facilities of the studios can lend greater production value to TV film commercials is exemplified in a three-minute commercial recently produced at Warner Brothers' for Ford Motor Company to introduce its new 4-passenger Thunderbird. It was photographed by Arthur Feindel, A.S.C., veteran cinematographer now photographing films for television.

Before the production of TV commercials on film became the big business it is today, many considered commercials something to be filmed in a spare room with a Cine-Special and a couple of photofloods. Today, not only are there scores of motion picture producers from coast to coast devoted to filming commercials for television, but nearly every major studio in Hollywood now has a department set up for their production, and it is here that the commercials of more and more of the big national advertisers are being turned out.

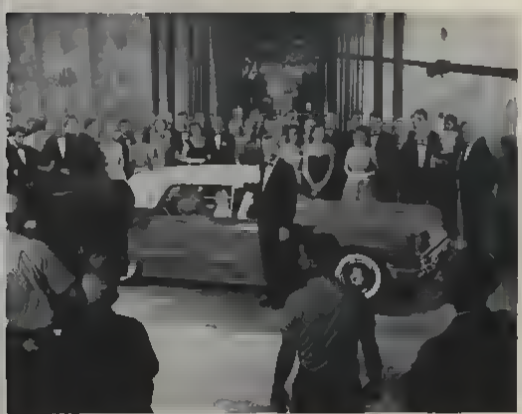
Major factors responsible for the swing of big-budget sponsors to studio-produced commercials are the studio's know-how and the top-quality photography and lighting afforded by the studios' wealth of experienced technicians working with the best cameras, lights and related equipment. As with the Ford Thunderbird commercial, those made by Warner Brothers TV Commercial and Industrial Film Division take on the appearance of a major production, and the resultant quality is readily apparent in their transmission.

Specific purpose of the Thunderbird commercial was to introduce its new 4-passenger model. An elegant car, elegance was to be the dominant visual note. It was decided to open up on a plush hotel ballroom and then bring the new car on the floor for the approval of the formally-attired dancers. Actor Dick Powell then was to appear in the midst of this elegance and make the commercial announcement.

The photography was carefully planned in advance, just as with major feature productions. Cinematographer Feindel sat in with production supervisor David DePatie and others to lend the benefit of his experience in lighting and

ends Production Value To Ford Commercials

The filming of this Ford Thunderbird television commercial took on the appearance of a major production, photographed as it was on a Warner Brothers' sound stage by veteran cinematographer Arthur Feindel, A.S.C., using the best of camera and lighting equipment.



IN A NEW SET-UP, Feindel's camera focuses on a side-view of the Thunderbird as Dick Powell continues to point out its features

DICK POWELL and director Dave Monahan discuss merits of new camera set-up proposed by cinematographer Feindel (center)

photography and thus simplify the photographic procedure once production got under way on the sound stage. How this pre-planning paid off is illustrated in the unique visual impact given the commercial's opening by means of an intricate boom shot conceived and directed by Feindel.

The commercial opens with the camera high above the stage, looking down upon the couples below dancing to the

(Continued on Page 448)

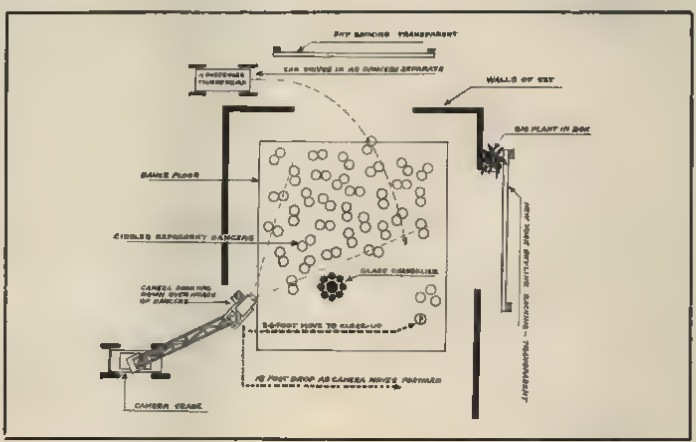
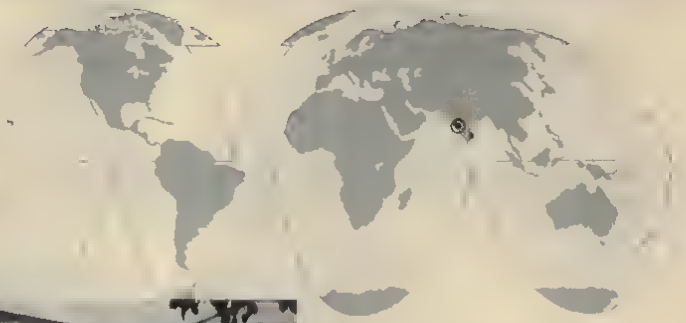


DIAGRAM SHOWS overhead view of stage and ballroom set where Thunderbird commercial was photographed. Position of camera boom is shown, also path taken by boom in moving in and down as the Thunderbird is driven onto ballroom floor.

AROUND THE WORLD WITH MAGNASYNC



poona, India

Resting peacefully in a fertile valley, toward the interior of India, is Poona, home of Prabhat Studios, the oldest motion picture facility in the "Jewel of the Orient. Here, Magnasync executives stop on their trip around the world to inspect one of the many International Magnaphonic Sound System installations. Left to right: Mr. Shankarao Damle, Chief Sound Recordist of Prabhat Studios; Mr. S. N. Sengupta of Kine Engineers (Kapila, Sengupta, Rao); Mr. Mohammed, the Chief Cameraman of Prabhat Studios, the actor sitting near the Magnasync Recorders is the well known Indian actor, Mr. Jagirdar.

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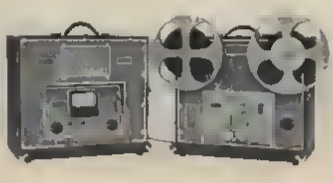

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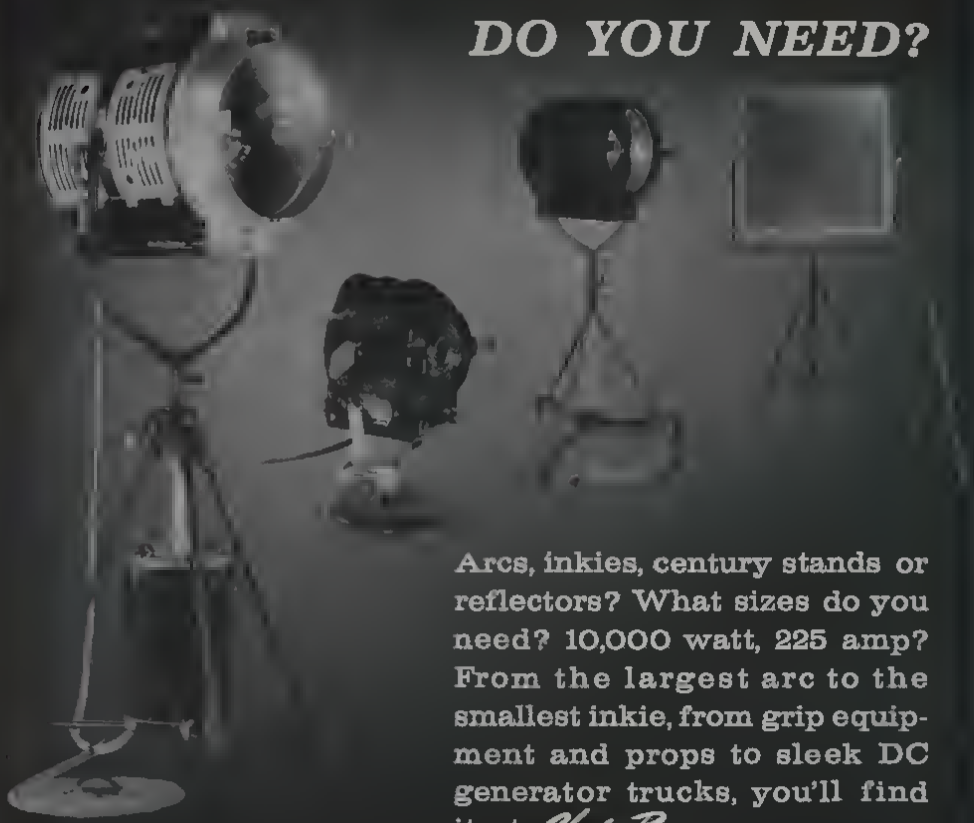

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DUBBING AN AUDIBLE EFFECT for a scene for TCF's "A Nice Little Bank That Should Be Robbed" For required sound of footsteps, two men (center) supplied the footwork in sync with screened action. Sound was picked up by stereophonic microphones at end of lowered boom and channeled to recorder through mixer in right foreground. Track was later integrated with the picture by the sound editing department. (All photos courtesy of Action Magazine, 20th Century-Fox Studio Club publication.)

Sound Dubbing—A Specialized Recording Technique

Not all the film sound you hear is recorded simultaneously with the picture. If an actor "fluffs" a line or some extraneous noise intrudes on an otherwise good take, the sound is recorded again and dubbed in later. Many sound effects are also dubbed.

By BOB WEATHERFORD, M.P.S.E.,
Sound Editor, 20th Century Fox Studio

FROM THE VERY BEGINNING of the sound motion picture era, great care has been taken to capture in recording all the sound in the picture with the utmost realism. Today, sound editors find validity in the old Chinese proverb, "One picture is worth ten-thousand words," where the picture's sound is realistically recorded and its sound effects subtle and unobtrusive. Movie-goers, generally, take all of the sound in today's pictures for granted, unaware that in many instances much of the dialogue and some of the sound effects are dubbed in later by the sound editor.

In the not too distant past, before the modern techniques of sound editing were developed, the use of dubbed dialogue was quite limited. On the sound stage during shooting the word was "quiet!" No one moved or whispered. The only sounds recorded were the actors' dialogue. Occasionally though, from out of the blue, came the putt-putt of an airplane motor, and production had to halt until the sound mixer declared the plane out of range of the mi

crophone. Then, everyone crossed his fingers while "quiet" ran through the chain of command, and they had another go at it. The sound department even had balloons flying from the tops of their highest stages to indicate to planes that shooting was in progress.

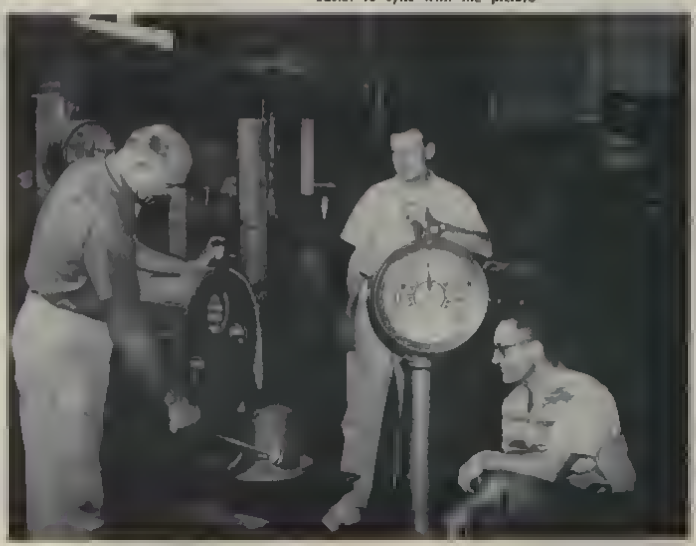
Now, however, with the advent of magnetic film, and the heretofore mentioned modern techniques of sound editing, the sound stages are not so quiet and the assistant director merely says "shh." The balloons have vanished and the roar of sports cars can be heard on studio streets. If any extraneous sounds venture into the sound tracks the by words are "dub it!"

To the uninitiated, this means that photographically the take is acceptable, but the sound recording was marred by unexpected extraneous noise, and therefore the dialogue must be recorded again and dubbed-in later by the sound editor.

ACTOR ROR EVANS (left) watching scene on screen before him, rehearses dialogue to be dubbed for tense murder scene in TCF's "Quick Draw at Fort Smith." The sound editor gets set to cue Evans, while boom operator watches proceedings in background. All wear headphones through which they receive instructions from recordist in sound department.

CRIES, HOOTS, rustles, cricket chirps —and practically any other sound you can name—is available already recorded in TCF's Sound Film Library. Spotting such sounds in the track of a film is the specific job of the sound editing department.

FROM THE STUDIO'S extensive Mechanical Effects Department, a sound editor selects devices which will produce the right shipboard sounds for a picture. Recording sound of real thing is always preferred to using stock sound-effects tracks because former is easier to sync with the picture.



A typical re-recording session for dubbing is illustrated in the photo at top of this page, here the actor, on cue will repeat his lines as he watches his image projected on the screen—the take that previously was ordered dubbed.

The decision to dub doesn't always occur following a take. Very often a flaw in the sound is not discovered until the track is reviewed by the sound editor. In the usual procedure at 20th Century Fox Studio, the Sound Department reviews the dailies — the scenes shot the previous day — and decides which scenes should be dubbed and notifies the film editor, who in turn notifies the Continuity Department. Typewritten

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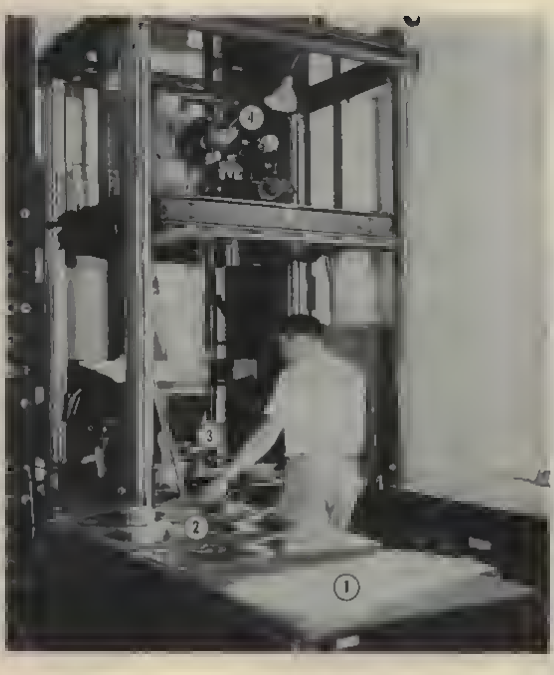


PHOTOGRAPHING an animated cartoon in Vista-Scope and color with modern multi-plane animation camera stand in Walt Disney Studio Background panels yet to be photographed are at (1), the animated action cels at (2) The animator follows instruction sheet (3) while camera operator above maintains watch on the camera (4) (Photo copyrighted by Walt Disney Productions)

MODERN ANIMATION equipment, such as this, is used daily in the production of animated films for TV and industrial and training films (Photo courtesy Animation Equipment Corporation)

ANIMATED FILM TECHNIQUES

First of a series of articles detailing the modern techniques of producing animated films, from inception of the story idea to completion of the final release print.

By CARL FALLBERG

MOTION PICTURE ANIMATION, which received its greatest impetus with the advent of Walt Disney's "Mickey Mouse" cartoons, is today one of the industry's important production techniques. Not only is it used in producing entertaining one-reel short subjects, but feature-length films and fantasy sequences in combination with live action as well as novel effects in titles More recently, however, it has become an important technique for producers of teaching films, and during the past five years. the use of animated films for TV commercials and industrial projects has grown at a startling rate Obviously, there has been created an extensive technique in this field in which the various steps in the production of animated films has become specialized, requiring trained technical personnel.

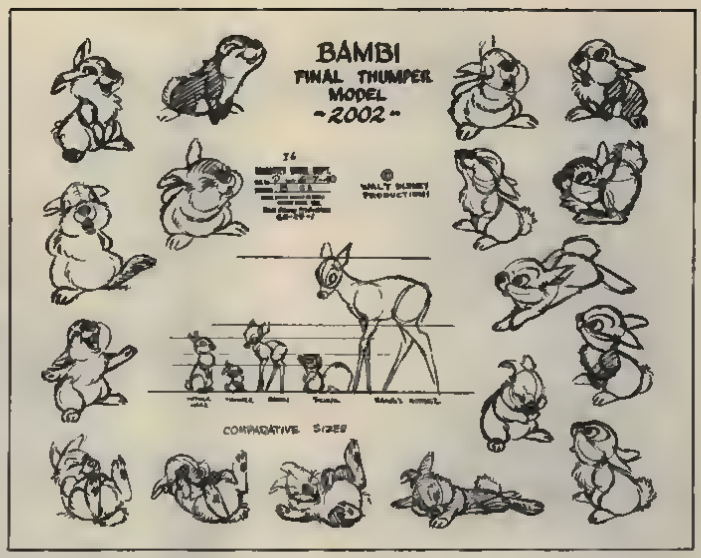
Assembly line methods are essential to successful animated cartoon production on anything approaching a commercial scale. It is technically possible for one person to do everything from the first preliminary story-sketches to

photographing the finished drawings on film; but there is such an infinitude of detail involved (if you count the sketches and tracings, there are probably two or three drawings to be made for every frame in the completed film!) that the number of hands doing the work simply *must* be multiplied. And if the product of these many hands and brains is to be a coherent whole, their work must be coordinated—standardized—to get the desired results.

Standardization, then, is the necessary element in animated cartoon production. Conformity of methods and systematized procedure is absolutely essential in all phases of the production of a cartoon—from the initial story idea right on through to the finished print. A picture passes through so many different hands during the course of production that confusion would result from inconsistent methods. After all a cartoon studio is a factory in which entertainment is manufactured by the assembly line method, and the secret of success on the assembly line lies in doing the job the same way each time, for a uniform result.

However, it isn't as uninspirational as it might sound. There is no reason to believe that cartoons are suffering because of the system used in their production. All it really amounts to is organized, disciplined thinking. Good results in any endeavor are obtained only by intelligent, practical efforts to produce those results. It doesn't matter whether the tool used is a shovel, a lathe, or a brain.

The time and thought that goes into developing a cartoon story must be well organized in order to meet rigid production schedules. Ideas don't "just come." They have to be ground out by a conscious process. Creative thinking has to be disciplined to eight hours a day, five days a week. A story man in a cartoon studio has to let his mind wander freely, but keep his feet on the ground at the same time. He has to create by the clock, so to speak.



A "MODEL SHEET" prepared for Walt Disney's memorable production "Bambi." Model Sheets guide animators in maintaining uniformity in size and perspective of characters, show typical expressions of the character as previously developed during the story's preparation.

Story work on a feature cartoon follows the same procedure as that on a short, except that the time and money budgets are naturally greater. A short cartoon (1-reel) requires from three to six weeks for story work, whereas a feature story might be in process of development for a year. On features, too, there is usually a lot of side work connected with research on settings and characters.

It's necessary in a discussion of this sort either to strike averages or to cite specific examples when mentioning methods and procedures. Since the Walt Disney studio has more or less set the standards for the whole industry, it might be just as well to use as an example here the general production procedure that an average cartoon goes through in the Disney plant.

Most of present-day cartoon story material is original, being developed within the studios. Even when an idea is borrowed from an old fable or fairy tale, the context and "business" has to be altered and modernized for cartoon treatment, so that usually very little remains of the original story but the characters and basic story line.

This isn't without justification, for some of those old fairy tales get pretty gruesome, full of murders, torture and assorted mayhem. Even in the original version of "Snow White," the wicked queen ended up by rolling down a hill in a nail-studded barrel. This sort of stuff, obviously, can't be used.

However, details like this are not what limit the use of most fairy tales. Other factors have to be considered: general audience appeal, sympathetic characters, familarity of subject-matter, and so on. Then again, it's found to be about as easy to cook up an original cartoon story as it is to adapt a fairy tale or fable.

Whatever the source of the material, the first job of the story man is to develop a rough, over-all continuity as quickly as possible, without worrying too much about the various gags or detailed staging of business at this point.

A story man in a cartoon studio isn't a writer, in the literal sense of the word. He doesn't write his ideas out or type them, like a writer in a live-action studio, but illustrates them with rough sketches. He might scribble or type the bare outline of the picture, or, as he's sitting in his room courting inspiration, may jot down the ideas and gags as he grinds them out of his brain,

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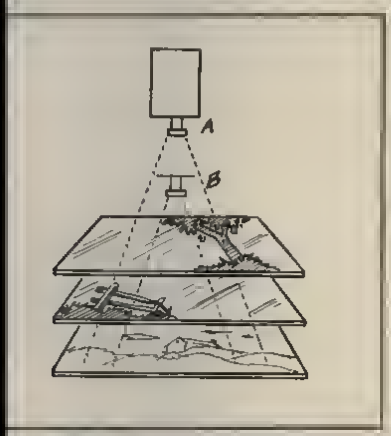
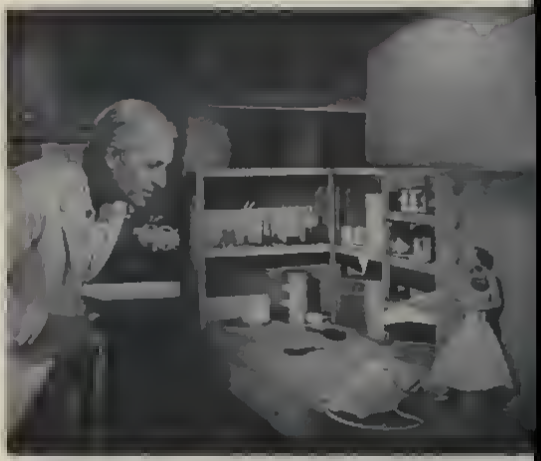


SKETCH ABOVE shows principle of multiplane animation camera which gives 3-dimensional effect to animated pictures made by this method.

HOLLYWOOD I

By FREDERICK FOSTER

16MM MOVIE-MAKING led Bert I. Gordon to Hollywood where he's new producer-director of suspense-fantasy films



GORDON employed combination of split-screen photography and over size sets to produce scenes such as this for "The Fantastic Puppet People"

ONE OF THE REAL Cinderella stories of Hollywood is the achievement of 35-year-old Bert I. Gordon, who rose from an ambitious 16mm amateur to a full-fledged Hollywood producer-director in less time than it takes a kid to grow to bubble gum age. It's the kind of success so many aspiring 16mm nonprofessionals dream of but rarely, if ever, accomplish.

Hollywood is noted for its cold disdain for the aspiring amateur and for this reason Gordon's rise to success is all the more startling. Those who have seen such films as "The Cyclops," "The Beginning of the End," "The Fantastic Puppet People," and "The Colossal Man" most certainly were impressed with the ingenious special effects which produced with startling realism on the screen a gigantic one eyed monster, giant grasshoppers overwhelming a city, people only 12 inches high, and a bald headed giant who menaced a populace. In addition to producing and directing these pictures, Gordon conceived, developed and executed the special effects that were so essential to each production. These were low budget pictures, and the effects—normally considered a costly item in standard major studio operations—had to be low-budget too. Gordon had already developed an ingenious flair for this sort of thing. He had come up the road of film making the hard way—self-taught, inventive, and with a tremendous imagination.

Gordon's professional aspirations received their first impetus while he was attending University of Wisconsin. He photographed and produced the university's 16mm newsreel, which later became a regular weekly release in local theatres.

With advent of World War II, he went into service and tried to get into one of the motion picture divisions. The army decided they wanted him in Radar. After he was mustered out, he plunged into film making again, this time determined to make something of it. By a strange turn of luck that even he finds difficult to explain, he went after and got a commitment to produce a series of TV commercials for Chevrolet. Then he suddenly realized he had never before made a sound film!

But if he didn't know how to put sound on film, Gordon knew where to look for advice. He telephoned the laboratory in Chicago that had been doing his processing and stated his problem. The lab gave him step-by-step instructions which involved for Gordon a sizeable toll charge on his telephone bill. He set to work on the commercials and soon had completed the first six of an order for thirteen. The films were edited in his living room on a card table.

Most men who today are successful film producers, technicians, writers or directors, usually got their start in some nominal job in a studio. Gordon, on the other hand, is self-taught and highly practical. From the very beginning of his serious film making, he's had to learn everything himself without benefit of a professional at his side—which is the reason, no doubt, that he knows so much about every facet and phase of motion picture production. Earlier, when the TV film commercials he produced required animation, he found professional animation equipment beyond his means, so he built his own. He taught a college art student how to prepare the required illustrations and cels, and with the assistance of his wife, Flora, photographed them. Ever since,

ULL OF DOORBELLS . . . .

"It seems that I rang them all in my quest for an opportunity to prove my movie-making ability," says Bert I. Gordon who today is a successful producer-director of suspense-fantasy films.

A LARGE PHOTO cutout against a sky backing provided the "set" over which giant grasshoppers swarmed in "The Beginning of the End." Over-cranking camera slowed 'hoppers movements for added realism.

ACTOR GLEN LANGAN played little role in "The Colossal Man," was made to appear as giant through miniaturization of sets built to infinite scale, plus use of split-screen and matte techniques.

Mrs. Gordon has worked closely with her husband on all his productions. For her valuable assistance she's credited on the screen as Assistant Supervisor, Technical Effects.

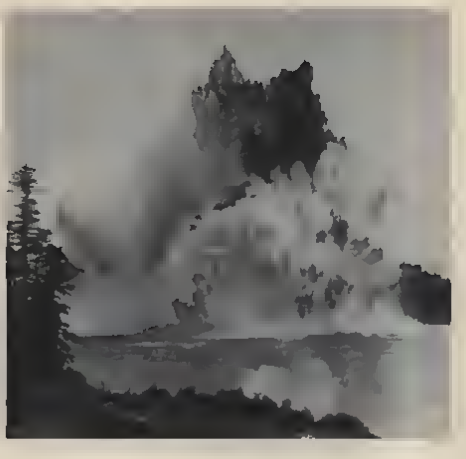
Turning out commercials meant that Gordon spent a lot of time in front of his TV set. Every time he watched a dramatic video show, it added fuel to a burning desire to produce feature films. To accomplish this meant moving to Hollywood, so the family pulled up stakes and headed west. Once in Hollywood, Gordon started ringing doorbells in search of a job. "Hollywood is full of doorbells," he said, "and it seemed that I rang them all." It finally paid off, however, when Hal Roach studio summoned him as a production supervisor on the "Racket Squad" television series. That ended the doorbell ringing and started Gordon on his Hollywood career.

From here he went on to co-produce and direct "King Dinosaur" in 1954—a milestone in his fast-rising career—for in the suspense and horror film he found a genuine challenge for his flair for special effects. This low-budget production proved a modest hit at the boxoffice and helped set a new trend in screen fare that continues to this day, and it brought Gordon his first real professional recognition as a producer.

He wrote, produced and directed "The Cyclops," in 1955; produced and directed "The Beginning of the End" in 1957;

(Continued on Page 450)

TENSE MOMENT during shooting of scene for "The Spider," Gordon's latest fantasy production. In background, from left, are cinematographer Jack Marta, Bert I. Gordon, and script supervisor Elayne Gamel. At camera are assistant Walter Stameli and operator Al Edens.



After days of gruelling preparation bad weather almost defeated Parr Films' cameramen in photographing the mast spectacular nan-atomic explasian ever staged onywhere.

FILMING THE

PHOTOGRAPHING THE largest non-atomic explosion ever set off gave Parry Films Ltd. of Vancouver, B.C., some unusual problems. They were solved successfully in the production of "Devil Under the Sea," a 28 minute industrial film made for Du Pont Company of Canada.

It was Du Pont who supplied the explosives for the underwater blast that was the climax of the picture.

The project was the demolition of Ripple Rock, a navigation hazard in Seymour Narrows, 100 miles northwest of Vancouver. The narrows lies on the main shipping route to Alaska from Vancouver, Seattle and other Pacific Coast ports.

Ripple Rock consisted of two shoulders which lay only 9 and 20 feet below water at low tide. It had been responsible for the loss of scores of vessels and more than 100 lives in the past century. The tunneling, placing of explosives and the blast itself were the subject of the film.

The three phases of the Parry Films job were: filming the tunneling under Seymour Narrows into the rock, and the placing of explosives: shooting footage of the actual blast; and designing and carrying out the animation which formed about one-third of the film and explained phases of the project which could not be photographed in live action.

Each phase had special problems:

When shooting in the main 2300-foot tunnel under the narrows from Maud Island, chief cameraman Jack McCallum and electrician Jack Tompkins worked with director Dave Bennett in a space only 5 by 7 feet. They faced extreme dampness, power supply problems, the need to keep out of the way of engineers and miners, and the strain of working around high explosives.

Lights frequently were shattered by dripping salt water in the tunnel 150 feet below the channel bed. The power supply was a single circuit running more than two-thirds of a mile from the tunnel mouth. Sockets of lights and elevator stands corroded quickly.

PLANNING THE lighting and camera angles for shots to be made in tunnel under Seymour Narrows leading to Ripple Rock. Object here was to skew vast network of tunnels necessary to transporting explosives to the detonation site.

CONSTRUCTING observation bunkers on hill half a mile from blast. Here two cameras with telephoto lenses were set up to record effect of blast—one can be seen on triped in doorway of nearest bunker. Sandbags offered protection from detonation and flying debris.

By R. A. FRANCIS

LAST AT RIPPLE ROCK....

McCallum kept plastic bags tightly around his cameras except when actually shooting. Even with this precaution, cameras had to be taken apart and cleaned after every trip underground.

There was virtually no room to achieve camera angles. Filming the drilling in the actual shoulders of the rock, the crew often worked standing in 18 inches of water. This occurred when hardrock men, probing for the precise contours of the rock, diamond-drilled through to seawater. Then the water poured in through the drillhole until it was plugged.

While McCallum and his crew were shooting the packing of 1375 tons of Nitramex 2H explosive into the honeycomb of tunnels, director Bennett went ahead with plans for filming of the blast itself.

This presented the primary problem of choosing safe locations, since explosives men were not certain precisely what effects the undersea blast would produce above water. The main observation bunker was built on Vancouver Island, 7000 feet from the blast and 1000 feet above sea level. It offered a clear view north up the narrows to the point where the rock lay.

On the day of the blast, there were in the bunker 11 motion picture and still camera operated by seven cameramen, plus the necessary sound equipment.

Parry Films' crew had to move in more than a ton of camera equipment, batteries and camp kit to the bunker location. To reach this inaccessible spot, it was necessary to build a 1000 foot skyline from the highway, which also served to move four-inch planking for the bunker roof.

Meantime, other camera locations were chosen for recording the explosion from a variety of angles. On a dock in Menzies Bay, 5000 feet from the narrows, Bill Round set his camera near sea level. He was to set it in motion as the countdown from 30 seconds began, then run for a bunker.

Another cameraman, Bill Roozehoom, set up remote camera and sound equipment 20 feet above high water mark on Quadra Island, 2400 feet from the rock. He had two motor driven cameras in a steel box, operating in tandem and focused on the center of the narrows. Before the blast he took cover in a bunker higher up near the shelter where Dr. Victor Dolmage, who planned the operation, set it off.

Cameraman Ray Kellgren was assigned to April Point, five miles southeast, to film tidal wave effects. As it turned out, there were none, and failing weather even prevented him from seeing the blast.

In all, the following motion picture equipment was used by Parry Films' cameramen in photographing the gigantic blast and its preparation.

Two 35mm cameras with Eastman Color, three 16's with Kodachrome—one with a 15mm lens, one with a 25mm and one with a 60mm—all shooting at 24 frames, two other 16's with standard lenses set at 48 frames; and a Fastax shooting at 400 frames.

The technical preparations were as complete as they could be made. The only uncertain factor was the weather—and the weather fouled up.

Throughout the months of preparations, Dr. Dolmage planned to set off the explosion at 9:31 a.m. April 5—Easter Saturday. At that moment the tide would be running north, which would help disperse tidal wave effects from inhabited areas, the tide level would be a few feet above mean low, which for engineering reasons he considered ideal; the wind.

(Continued on Next Page)

TRANSPOSITING cameras and gear to observation bunker, pictured at left, involved erection of thousand-foot long overhead cable. Supervising placement of camera was cinematographer Jack McCallum and Parry's film director Dave Bennett.

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FILMING BLAST AT RIPPLE ROCK

(Continued From Preceding Page)

at that time of year, might be from the south which would tend to carry chemical fumes away from spectators, who would be stationed to the south. And at this date one could reasonably expect clear weather.

The day before the scheduled blast was photographically ideal, and the photographers' spirits were high. But Saturday dawned overcast. During the hours before the countdown the cameramen argued and debated, changing lens settings constantly.

Light conditions grew suddenly worse in the last half hour before the blast. Then as the final countdown from 30 seconds began, light deteriorated suddenly again. Everyone made a grab for their lenses for a last-second exposure change. At zero minus 15 McCallum and his colleagues started their cameras with lenses set at f/3.5.

Though the overcast turned to rain within a few minutes of the enormous explosion, ironically the weather cleared within an hour, and remained brilliant all the rest of the day.

Meanwhile, back at the studio, animation sequences which comprise nearly 7 minutes, or one quarter of the picture, were in the works. Marguerite Roozeboom, head animation artist for Parry Films, had prepared sketches for 15 animation sequences.

Basic reason for the extensive animation was to picture and explain the underground layout of coyote tunnels in Ripple Rock itself. This labyrinth, totaling 3200 feet of tunnels, could hardly be represented except on charts.

This series of drawings covered the principal stages of the Ripple Rock operation: progress charts of the engineering planning, perspective of the Seymour Narrows area; progress of drilling under the narrows and into the rock's twin peaks; layout of the fusing system, and charts showing the direction of the effects of the blast.

The resulting animation sequence is said to be the longest ever used in a Parry Films production.

Lew Parry whose company has been making industrial films in Canada for the past ten years, said the problems connected with photographing the Ripple Rock blast were the most unusual and challenging he had ever encountered in his filmmaking career. ■

SHOOTING "GIGI" ON LOCATION IN PARIS

(Continued From Page 425)

Palace de Glace, the Tuileries, Trouville, Place Furstenberg, the shaded streets of the Seine, and the Bois de Boulogne where the historic Battle of Flowers was staged for the picture with more than two million blossoms used.

When the company moved indoors to shoot scenes in Maxim's or on the sets built in a local studio, the photographic problems became more numerous. "It slows you down a great deal not to have the initiative of a Hollywood crew working with you," Ruttenberg explains. "The Parisian technicians are eager and willing, but they just don't have the Hollywood viewpoint or training. Whereas on a Hollywood sound stage the gaffer or grip will anticipate your needs and take care of them without having to be told, the French worker, from experience, waits for instructions."

There is no "roughing in" of the lighting in Paris production procedure, such as is general practice in Hollywood. This meant that Ruttenberg personally had to spot every lamp on the sets before the company could assemble for shooting. (NOTE: In Hollywood, the head electrician, known as the "gaffer," "roughs in" the set lighting with the basic lamps, then adds whatever other units may be required after the "rough-in" has been approved by the cameraman. In contrast, the No. 1 cameraman in most European studios directs every light placement on the set, and for this reason is generally known as the "lighting cameraman," instead of director of

(Continued on Page 442)

PRODUCTION FACTS
"GIGI"

Produced by Arthur Freed
for Metro-Goldwyn-Mayer

Photographed by ... Joseph Ruttenberg, A.S.C.
Operator ... Charles W. Riley
Assistant ... Ned Belford

CAST: Leslie Caron, Maurice Chevalier, Louis Jourdan, Hermione Gingold, Eva Gabor, Jacques Bergerac, and Isabel Jeans

Directed by ... Vincente Minnelli
Music by ... Frederick Loewe
Screen Play and Lyrics ... Alan Jay Lerner
Production Design ... Cecil Beaton
Art Direction ... Preston Ames
William A. Horning
Editor ... Adrienne Fazan
Music ... André Previn

Photographed in CinemaScope on Eastman Color negative with Mitchell cameras.

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Switar 25mm f/1.5 FM 1½ to inf. Visilecus $118.50
Yvar 100mm 4" f/3.3 tele 6 power magnification. Focuses 8' to inf $89.50
Yvar 18mm w.a. f/2.8. Focuses 1' to inf. "C" mount Visilecus $50.50
Pizar 25mm 1" f/1.9. Focuses 1½' to inf. "C" mount Visilecus $67.50
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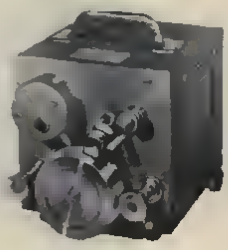

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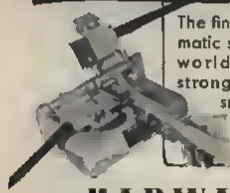

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photography or cinematographer.—EDITOR)

When Ruttenberg visited Maxim's for the first time, it was for the purpose of familiarizing himself with the place and planning the shots in collaboration with director Minnelli, designer Cecil Beaton and art director Preston Ames. That it would be a real challenge was immediately apparent. Because the story of "Gigi" is laid around the turn of the century, the aim was to point up the rich quality of the decor of that period in both furnishings and costuming. In this respect, the choice of the original Maxim's for staging much of the important action proved ideal. "Shooting a story in actual locales always adds more interest to the picture," said Ruttenberg.

"We decided to shoot the scenes in Maxim's in low key for two reasons," Ruttenberg explains, "because the limited space precluded use of a large amount of lighting equipment, and because low key lighting seemed most appropriate in our aim for naturalness and authenticity. Here no colored light was projected into the sets. We used straightforward illumination at all times."

The big problem encountered in Maxim's, aside from the cramped space in which the company had to work, was the hazard presented by the countless mirrors adorning the walls; and this was further complicated by the fact many of the shots were to be made with the camera on dolly- or crane-mounted, and moving among the tables in a continuation of the "fluid camera" pattern previously established for the picture. No operator ever worked harder perhaps and certainly Ruttenberg never worried more lest a mirror coming into camera range reflect some unwanted person or object or even worse, a light! Much of the trouble Ruttenberg obviated by conducting extensive camera rehearsals with his eye glued to the camera finder. After a long period of re-locating lights, and raising the camera in some places to avoid a direct view into the mirrors, the numerous takes in Maxim's were completed. It was here, too, that the cooperation of art director Preston Ames contributed much in minimizing or eliminating entirely many of the problems created by the mirrors. A change in the decor very often was all that was required to clear the way for straightforward photography in otherwise mirror-inhibited setups.

Because variations in the color temperature of the set lighting is most generally induced by fluctuation of voltage in the lines feeding the set lamps, maintenance of uniform color temperature is one of the paramount problems connected with photographing a color production in the studios or actual-locale interiors on the Continent. Long experience in filming overseas led Ruttenberg early to find a solution to this problem, too. Thus, when shooting interiors in Paris for "Gigi," he had a voltmeter—cut into the power line—mounted close to the camera so he could always keep a close check on the line voltage and readily detect any fluctuation that might affect color temperature. In doubtful situations, he used his color temperature meter.

Ruttenberg's ability to function smoothly with a foreign camera crew whose language he cannot speak is indicative of his unique adaptability and his flair for getting along with people. He has nothing but praise for every French technician who served with him, and their respect and friendship has been manifested in a memento presented him by the crew upon completion of his last picture there ("The Reluctant Debutante")—a rare 20-franc goldpiece more than a hundred years old, mounted in a gold charm frame.

In summarizing this photographic accomplishment, the comment of Jack Moffitt, in his review of the picture in *The Hollywood Reporter* (May 15, 1958), is as appropriate as it is laudable: "Joseph Ruttenberg's photography in CinemaScope and Metrocolor," Moffit stated, "achieves a Toulouse-Lautrec mood, especially in the shots actually taken in Maxim's famous restaurant."

Indeed, there is much that is fresh and new in cinematographic artistry in every location scene in the picture. And this may be due as much to working under adverse conditions as anything else. "Shooting a picture at the studio in Hollywood, where resources are unlimited, can easily result in a mediocre job—unless one maintains an awareness of the pitfalls," Ruttenberg said. "When faced with the limitations in both technical help and equipment we so often encounter overseas, the cameraman seems to get closer to his work, employing ingenuity and resourcefulness in an effort to 'make do' with whatever is available, invariably coming through with an inspired photographic job."

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Upon completion of "Gigi," Roland Thornton, assistant to Eric Johnson of the Motion Picture Association of America, Inc., and in charge of the Association's London office, wrote a letter of compliment to Joseph Ruttenberg, part of which is quoted below:

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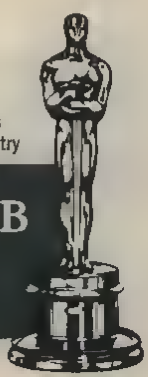

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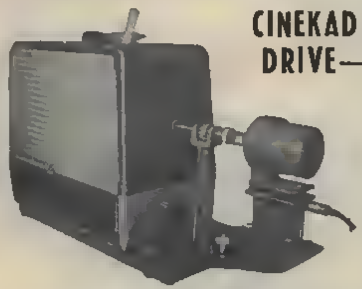

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ANIMATION TECHNIQUES

(Continued From Page 435)

but immediately afterward he will get those ideas into picture form with rough sketches Since the animated cartoon is a pictorial medium, certainly the best way to develop an idea for it is by means of pictures. A cartoon man is trained to think visually. he thinks of how his ideas will look on the screen, not how they will read on paper.

It isn't absolutely essential that the story man be an artist, but he should be able to express his ideas by drawing, at least in a rough way, so that they can be comprehended without the necessity of much verbal explanation. Written descriptions of action are hardly ever bothered with, except for someone's personal reference, indeed. many of the story men and animators have become so facile with their pencils that they can draw up a gag faster than someone could write the description in longhand. And there is a genuine prejudice against reading in some quarters of the cartoon business, they've become so used to thinking of everything in terms of pictures.

In the early days of the animated cartoon, story work was sometimes done in conjunction with actual production to the extent that animators developed their own gags and business as they animated a scene, being given so much footage to fill up with "something funny." But this off the-cuff method of working was soon done away with as the cartoon came of age Larger staffs brought about specialists for every job, and story work and animation became distinct functions.

Now as studios have enlarged and become more complicated, another specialized function in story procedure has been added in the form of the story-sketch man. This artist's job is to do nothing but sketch up the story man's ideas, making careful. "dressed up" drawings with consideration for character drawing, setup, size, and camera-angle.

By permitting the story-sketch artist to take over the burden of drawing up the continuity, the story man can devote more of his time to creative thinking, and not worry too much about the mechanical process of drawing. Often enough a good sketch artist, while not creative from the standpoint of story ideas, as a good creative draftsman he can aid the story in presenting an idea by the skill of his drawing Quite often. the value of a gag line lies in the way in which it is presented as much as in its content. The story man has a piece of goods to sell, and good showmanship in the form of well done story sketches,

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along with good ideas, help in putting the story across.

Sketches are generally done on paper of one size for the sake of uniformity of appearance, which makes the continuity easier to read when pinned up on the story board. A typical story board is a large 4x8 foot piece of wallboard or celotex, on which the story sketches are thumb-tacked in rows. In a sense, the script of a cartoon is composed of three or four pages, each page a story board four feet by eight feet long. However, no one is obliged to sit down at a table and turn pages that size. They're more conveniently hung up on the wall.

The first continuity of a story is thrown up with very rough sketches and penciled notes in order to get the overall "feel" of the picture. No time is spent on careful sketching at this stage of the game, for the next week or so will see the changes fly fast and furious. New ideas pop up constantly, and the story man works in a frenzy of creation while the story is in this embryonic state. He's left pretty much to his own devices, because it wouldn't do anyone else any good to attempt to decipher the hieroglyphics on the board that represent the story continuity to date. Neither are interruptions welcomed. Ordinarily, the story man is more than anxious to get reactions to his ideas from an outsider with a fresh viewpoint, but at the outset of a story, when the whole thing is pretty nebulous in his own mind, other folk's opinion would only prove to be more confusing than valuable. Besides, it wouldn't be any more logical to criticize a story in this rough state than it would be to pass judgment on the finished appearance of a building merely by examining the builder's first sketches. So, generally, the story man hangs out the "Do Not Disturb" sign.

After about a week goes by the skeleton continuity pinned on the story board begins to take on some meat. Little by little the holes are filled in with new sketches. Drawings take the place of written notes, better drawings supplant the first crude roughs. It is now that the first spontaneous fires of creation burn the hottest, but the process gradually slows down as the story becomes more and more tightened up. Gags that were first thought good become obviously out of place, and new ones that are more in line are worked into the continuity. A new gag might suggest a whole sequence of additional business, so it's eagerly pounced upon, fed, nurtured, and eventually takes its place in the story. Of course, the continuity should be well enough set to withstand the assaults of all the new angles, twists and approaches that are bound to come

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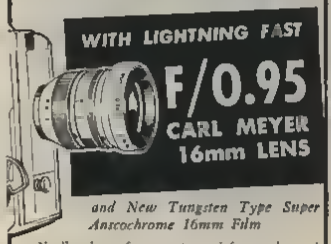

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up and threaten to throw the whole works off the track.

After the continuity seems to make sense and to move properly, action and gags are broken down to a certain number of sketches—using enough drawings to portray the business clearly. A good story sketch should represent a composite of the action in a scene. Exceptional care is devoted to developing just the right sort of pose or expression on a character, in order to punch the story point in the strongest way. Weak, indefinite poses are out, for they suggest that the story man was uncertain as to the attitude of his character. Animators are quick to climb all over indefinite business. They demand a clear cut conception of a character's feelings, mood, and action before they can transform it into life on their animating desk. So, every sketch has to mean something in telling the story.

The sketches described above are generally executed in pencil, with just enough shading and details to make them "read" clearly. There is a prejudice against "noodling" with story sketches, that is, making them too fancy with trick shading, color and background, because there's always the possibility that a change of thought tomorrow will consign many of today's drawings to the wastebasket. Story sketches should be purely functional, and not designed to satisfy anyone's aesthetic appetite.

Sometimes a color sketch is added to the continuity at spots where color, atmosphere and background effects play an important role in telling the story. It is up to the story man's good judgment to use color where it will do the most good, and not splash it all over the board with artistic abandon. In most cases, simple black and white sketches are all that's needed to illustrate the continuity. Cartoon men have become sufficiently skilled in imaginative visualization to be able to read into story sketches all that will eventually evolve from them as a finished picture, even in Technicolor.

Refined story sketches more clearly define the various characters, the bits of business and the gags, and it is here that the artist labors hard and conscientiously in developing the right attitudes and expressions.

This stage of story development is the ultimate polish the story man gives it before moving it to the hands of a director for animation. It represents weeks of planning and sweating on the part of a story man and sketch artist, as well as hours spent in group meetings hashing over every gag and situation.

When a story continuity reaches a certain stage of development, meetings are held to decide on improvements, changes, and to pass judgment generally. Amid a haze of cigarette smoke and a storm of words, the story is gone over with a fine-tooth comb, torn apart, analyzed and improved, and the continuity reset—until the next meeting. Those present in such a meeting usually include the director who will handle the picture in production and who is present to make sure he's getting some funny stuff, an animator or two, and maybe a couple more story men just to kibitz.

A secretary sits over in one corner with a stenotype, faithfully recording, ad verbatim, everything that's said. The poor girl sometimes has quite a time getting everything down, especially if the whole gang gets to talking at once. Then she has to glean the wheat from the chaff. These notes prove invaluable for later reference, as no one is expected to remember all of the suggestions that pop forth in a meeting. Later, when the storm is over, the story man can catch his breath and sit down in peace and quiet, recapitulating the changes that were brought up in the meeting.

In a story meeting, it is up to the story man to explain the stuff on his boards, pantomiming all of the action as he talks, going through all the dialog, whistling tunes if necessary, being cute, coy and dramatic by turn, in short, a one-man show. Some story men get so wrapped up in their acting that they all but knock themselves out! The only danger with this is that they are liable to be funnier than the business they're explaining, and thusly a story passes muster on the basis of the story man's ability as a comedian and not so much on the value of its gags.

After everyone's had his crack at the continuity, the story man is left to put the pieces back together again. Sometimes a story is left pretty well intact after a meeting, other times it's torn apart and strewn all over the floor. In this case, it means going back almost to scratch and starting all over again. However, changes as drastic as that aren't any reflection on the story man. Ideas are intangible elements, and a good story can always be made better by new, unforseen inspirations.

If a meeting leaves the continuity pretty much as it was, all that's left to be done before it moves into a director's hands for production is to make slight changes here and there which will tighten it up. This final polishing process is just so much work from the standpoint of the story man. The first spontaneous rush of creation that accompanied the early stages of slapping a continuity together has long since ebbed. Comes now the detailed process of sharpening up business, improving a story sketch, adding a gag, and bringing the staging and cutting as close to home as possible.

In doing this, the finished production is kept in mind constantly, for only by considering how a gag or piece of business is going to look on the screen can their values be accurately judged.

A screen writer for live-action pictures seldom worries about the staging, cutting or "filmability" of his material; that's the director's worry. And a big worry it sometimes is! Since the writer works only with words, it's difficult for him to visualize a practical picturization of what he's writing about.

A cartoon story man, on the other hand, works entirely with pictures in the planning of his ideas, and it's entirely feasible for him to make a practical stab at cutting and editing the picture while it's still in story form.

Actual production sometimes overlaps the story function to the extent that the dialog in a story if okayed, is recorded while the continuity itself is receiving the final going-over. In this case—depending on the time and money budget allowed the story work—a "running reel" of the story may be prepared, which means that a rough timing is given the entire story. each story sketch is photographed for the amount of footage necessary to depict the action it represents, and a dialog track is cut together to run in sync with this picture reel. If music has an important part in the dramatic effect of the story, a rough piano or organ track is prescored for certain sections.

This running reel, then, is a true representation of the story as to length and timing as it will appear on the screen, only instead of the action moving, it is approximated by the still poses of the story sketches. In this way, a sure check is made on the "screenability" of the business and the tempo of the picture while it is still in a fairly malleable state. Changes made after a picture reaches animation state are always costly and wasteful.

Finally the director who is to handle the production of the picture takes over from the story man in what is called a "pickup meeting." In this meeting, all the men who are to share in the work of pushing the picture through production are given a chance to become acquainted with it, the director, his assistant, the layout man (who will design the settings for the picture and who functions in a manner similar to a live-action art director), the animators, and the musician. The story man then has one last fling at explaining the continuity, unloads the whole works onto the collective shoulders of the director's unit—and turns his attention to a new story to start the fun all over again.

(To be continued)

SOUND DUBBING

(Continued from Page 433)

dialogue sheets are then sent along with the photographic scenes to the Dubbed Dialogue Department where the film is prepared for the dubbing stage.

This involves making prints of the scene or scenes to be dubbed and forming them into loops that can be run continuously on the projection machine for any length of time. On the dubbing stage the sound editor assigned to the picture together with the producer or director, rehearses the actor involved in the scene until the proper reading and synchronization of the scene is obtained. The dialogue is then recorded and the film loops filled away. The sound track is coded, then sent to the sound editing department to be integrated with the picture. Here, with the aid of a Moviola, the sound editors painstakingly match the sound track to the lip movements of the actor until both are perfectly synchronized.

Of course each scene that is dubbed must also have the sound effects replaced that were in the original sound track.

Since stereophonic sound has become a very important part of Twentieth-Century-Fox's CinemaScope productions, these sound effects must also be heard from the area of the screen where the action takes place. For instance, when an automobile goes by from left to right, the sound must go with it. There are three speaker positions—left, center, and right—on the screen, and the sound editor must not only cut-in the proper effect, but he must also cue the picture for the rerecording mixer to move the sound across the screen on his control panel.

There is another aspect to dubbing and that is the post-recording and editing of certain sound effects in a picture that were not practical or possible to record simultaneously with the dialogue at the time the picture was being photographed. It is an exacting technique, quite apart from other phases of the over-all sound recording procedure followed in film production today. Walter Rossi, Twentieth's Sound Editing Department head, was cited early this year for outstanding achievement in this field when he was presented the 1957 Academy Award for best audible sound effects in the picture, "Enemy Below." All of the sound effects used in this picture were either made by the sound

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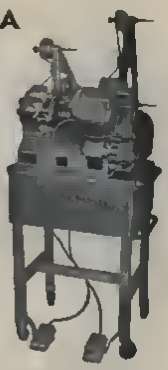

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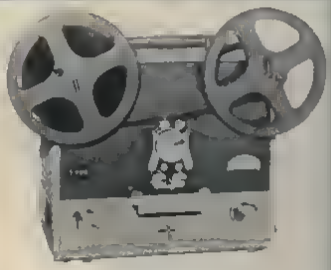

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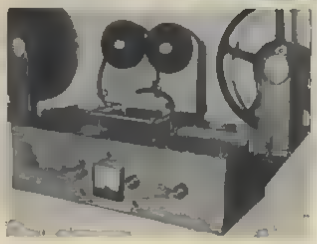

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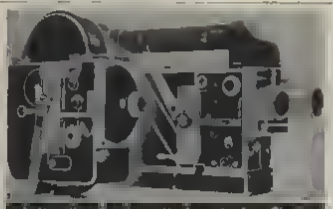

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editors or obtained from the studio's Sound Effects Library.

In "The Enemy Below," the sound department was faced with producing many technical sounds that had to be authentic. The sound of the torpedoes racing through the water, and the ping ping of the sonar devices are examples. Sounds such as the destroyer picking up location of the submarine on its radar screen, accompanied by sonar "blips" and racing after it at full speed. The turbine motors increasing speed, and the bow spray of the ship through the water becoming more pronounced. The destroyer approaching the submerged submarine, its "K" guns firing depth charges. The projectiles hitting the water—the splash being heard—followed by the tremendous underwater explosion of the "ash can." The shaking and rattling of the submarine. The splitting of a pipe and the hiss of escaping steam. Men moving on the deck of the alerted destroyer—the sounds of the ship through the water and the steady throb of the motor. The peculiar smoke stack roar that is as much a part of the ship's noises as birds are a part of a meadow scene. The suspenseful timing of the "ping" of the sonar devices as the destroyer passes over the submarine—the sliding of the torpedo into the tube and the actual firing. Periscope up and down. Destroyer being hit and the stopping of the motors. Oil fire burning on the open sea. The unusual sound of the destroyer sliding over the deck of the submarine. Even the footsteps in the submarine were made on a metal plate in the dubbing stage.[1]

Because sound effects generally are so expertly engineered and so carefully recorded so they integrate smoothly with the picture as a whole, the average movie goer is rarely aware he is hearing these sounds as the picture unfolds on the screen. This is what constitutes a good sound job.

It is really more the *effect* of the sound, rather than the sound effect that is important to the picture.

[1] Bob Weatherford, "The Next Sound You Hear," *Action* magazine, May-June, 1958

FILMING FORD THUNDERBIRD COMMERCIALS

(Continued From Page 429)

music that opens then forms the melodic backdrop for the commercial. As the announcer's voice is heard, the camera begins to move forward, and at the same time downward. As it comes to a halt in its combination crane and dolly movement, Dick Powell comes onto the floor and begins his announcement. At the proper moment, the dancers, who have stopped to listen to Powell's words, move to one side to allow the slick new Thunderbird—until now out of view—to be driven forward for a full camera view. From here, the camera—in a variety of static set-ups—reveals the car from several different angles, pointing up its construction highlights and beauty features as they are being described by Powell.

The accompanying diagram by Arthur Feindel shows how this opening shot was executed: the camera, mounted on a crane, moved slowly forward 24 feet to a closeup of Dick Powell, at the same time dropping 18 feet from its original height at the beginning of the shot. During this combination forward-vertical movement, the camera also was panned slowly — first to achieve the unique effect of showing the couples partially framed by the ornate crystal chandelier (the initial suggestion of elegance), then to keep it centered first on Powell and then on the Thunderbird as the latter rolls into view.

The two-day shooting schedule involved 14 camera set-ups the first day, and eight the second—which included 5 moves on the crane. For the intricate crane shot, described above, a 30mm lens was used on the Mitchell camera.

The set itself was given all the attention usually accorded sets for a major production. There was a transparent sky backing beyond the far entrance of the ballroom, while backdropping the opening at the right was another backing of New York's skyline. The entire set, including the backings, was lit with the same care that Feindel ordinarily gives sets for a dramatic film—with certain

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lighting nuances added which he finds enhances the transmission potential of motion pictures made for television

"The secret of good TV-commercial photography," he says, "is the careful use of back and cross light, using only enough front light to insure adequate exposure of the over-all set and subjects. An important factor in photographing the Thunderbird commercial was the use of maximum key light which enabled us to shoot with a small lens stop for the greatest depth of field."

A week before the Thunderbird-introduction commercial was put before the camera, the company spent a week at Carmel, Calif., producing another on the same car. Here, an altogether different lighting technique was used by Feindel, who explained that in photographing a new automobile out of doors, he uses front light altogether.

"Front lighting eliminates shadows and highlights which so often degrade the appearance of an automobile on the TV tube, and since it is our purpose to make the car appear on television exactly as it would when looking at the real thing, simple, straightforward lighting accomplishes this best," he said.

Feindel's art and advertising experience makes him especially qualified to photograph commercials, for he understands better than many others, perhaps, what constitutes good commercial illustration. Its an intangible something that

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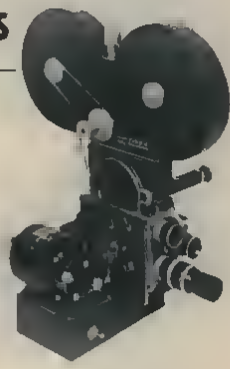

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comes out in his lighting and composition. Before taking up cinematography as a career, he was a commercial artist for a prominent ad agency. He is a graduate of the Academy of Design, New York, and a member of the Art Students League. For the past two years, he has specialized in photographing TV commercials. His first was for Kellogg's corn flakes at Republic Studio. From there he went to Universal-International Studio where he photographed commercials for the 1957 DeSoto automobiles. When Jack M. Warner formed the Warner Brothers TV Commercial and Industrial Films Division of Warner Brothers Studio, Feindel moved to that studio where he has worked closely with David DePatie, the Division's production supervisor, in planning the photography of its commercials — of which the opening moving-camera shot of the Thunderbird commercial is a typical example.

Reflecting on the current trend to major studio production of commercials, Feindel cited the great responsibility that the limited time alloted commercials puts on the creators. "There's an old saying that 'Time is Money'," he said. "In no other business is this so true as in television where the commercial must get its message across effectively in a time-period ranging from ten seconds to two or three minutes. Small wonder then that we find more and more of the important commercials produced on the same sound stages and with the same equipment and calibre of personnel that are employed on the best major studio productions. The obvious result is commercials that are more compelling by virtue of their expert photography and superior production value." ▲

HOLLYWOOD IS FULL OF DOORBELLS

(Continued from Page 437)

and since the first of the year has produced and directed "The Fantastic Puppet People," "The Colossal Man," and "The Spider." On all of these films he either did the special effects or, as in cases where special lab work was required, such as travelling matte printing, he worked right alongside the lab technicians.

Special effects are a substantial part of all Gordon's productions and involve or combine miniatures, background projection, traveling mattes and split stage shots. Sometimes, a single scene has involved all four. Gordon, who usually writes all or most of the script of each production, carefully plans the execution of all necessary effects in advance. Indeed, it is his knowledge of and ability to execute the various special effects that enables him to "dream up" the plots and story angles that mark his particular brand of pictures.

Some of the startling effects which Gordon has accomplished are to be seen in the accompanying photos. For "The Colossal Man," the illusion of the giant was produced mainly through use of miniaturized sets. Split screen plus oversize sets produced the illusion of the miniature people in contrast with the man of normal size in "The Fantastic Puppet People." And the awesome sight of the giant grasshoppers overwhelming a city was accomplished by using large photo cutouts of buildings, placing the grasshoppers upon them, then overcranking the camera to slow down their movement on the screen.

The productions mentioned above have all been filmed on a Hollywood sound stage and with regular professional technical crews. Cinematographer Jack Marta has directed the photography of the last three Gordon productions; Earnest Laszlo, A.S.C., and Joseph Biroc, A.S.C., each have filmed one. In each production, Gordon worked closely with these men during the filming of special effects whereas with most major studio productions, this work would be executed by a separate department. Few screen directors today are skilled in the art and techniques of special effects and are glad to let someone else handle this phase of a production.

Gordon's gift for effects is something like the talent that in the early days of films was vital to the success of every cameraman. For in those days "effects" as they were known then (such as fades, lap dissolves, superimposures, etc.) were executed in the camera. There were no special photographic or optical effects departments then, and cameramen vied with each other in dreaming up new effects and devising ways of accomplishing them. And so it is with Gordon. Instead of writing an effect into the script and leaving it to others to execute, he manages the entire effect himself and does it better because he has already woven the story fabric in such a way that the effect fits neatly into it. To leave it for another to do would not only interrupt the continuity of production but invariably delay production as well. Gordon's films are acknowledged "quickies" that fill a definite exhibitor need and, more important, make money.

Not all of Gordon's problems arise on the sound stage. Trouble often is encountered long before a picture goes before

the camera, such as the search for the right grasshoppers for "The Beginning of the End." For this picture, which involved giant hoppers taking over a large modern city a special species was required — a wingless variety that neither flew nor hopped. These were vital because it would have been impossible to control the common variety on the sound stage.

The non-hopping grasshoppers were finally located in Texas, but getting them to Hollywood posed another problem. California agriculture authorities balked at the idea of bringing into the state any kind of insect. California had enough as it was, they said. So after taking the necessary steps to guard against escape and multiplication through breeding (admitting male 'hoppers only insured this last qualification), Gordon obtained some 200 of the insects and went to work on the grasshopper sequences. The rigors of the sound stage soon began to take its toll until there were but 12 grasshoppers left. "We really had a time trying to make those twelve look like a swarm in the closing days of shooting," Gordon said. "Understandably, he added that this picture was the toughest of all the horror series he has made thus far, demanding the utmost patience.

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(Continued on Page 451)

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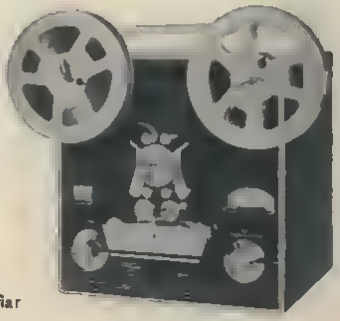

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(Continued on Next Page)

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HOLLYWOOD DOORBELLS

(Continued From Page 451)

produce low-budget films that make money at the boxoffice, Bert Gordon has at the same time brought into sharp focus the fact there's probably a lot of other ambitious and imaginative young men around these days with fresh ideas, just waiting for the opportunity to demonstrate their potentials Here, Gordon's recent accomplishments would seem to strengthen the newcomer's position, especially at a time when the industry appears to need new ideas—in stories and in film-making economy

Only a few years ago Gordon took up a 16mm ciné camera and began making movies. Like so many others, certain aspirations took hold and he set his sights on a professional career. He took advantage of what meagre local opportunities came along, and then suddenly found himself a producer of TV commercials There are many other 16mm ciné photographers now coming up this very road, and Gordon's success should give them courage. ■

PHOTOGRAPHIC ASSIGNMENTS

(Continued From Page 412)

WARNER BROS

● EDWIN DUPAR, ASC, "Sugarfoot"* with Wil Hutchins. Leslie Martinson, director

● RUSSELL HARLAN, ASC, "Rio Bravo" (Armada Prods., WarnerColor) with John Wayne and Dean Martin. Howard Hawks, producer director.

● MICHEL KELBER, "John Paul Jones" (Technicolor, John Paul Jones Prods., shooting in Spain) with Robert Stack, Charles Coburn and Erin O'Brien. John Farrow, director.

● TED MCCORD, ASC, "The Hanging Tree" (Technicolor; Baroda Prods., shooting in Washington) with Gary Cooper and Maria Shell. Delmer Daves, director.

● FRANK PLANER, ASC, "The Nun's Story" (WarnerColor, Fred Zinneman Prod., shooting in Rome) with Audrey Hepburn and Dame Edith Evans. Fred Zinnemann, director

● HAROLD STINE, ASC, "Maverick"* with Jim Garner Richard Bare, director, "Sugarfoot"* with Wil Hutchins Douglas Heyes, director

● HARRY STRADLING, ASC, "Auntie Mame" (Technirama, Technicolor) with Rosalind Russell and Forrest Tucker Morton DaCosta, director

● RALPH WOOLSEY, ASC, "Maverick"* with James Garner Richard Bare, director; "Sugarfoot"* with Wil Hutchins Leslie Martinson, director

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